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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Shigeki Ohno

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EXAMINER

REDDY, KARUNA P

ART UNIT

PAPER NUMBER

1796

MAIL DATE

DELIVERY MODE

08/13/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/561,680	Applicant(s) OHNO ET AL.	
	Examiner KARUNA P. REDDY	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) 3-6,8,16-18 and 20-24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,7,9-15,19 and 25 is/are rejected.
- 7) ☒ Claim(s) 7 and 11 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/21/2005, 7/24/2006, 4/12/2007, 7/13/2007,</u> | 6) <input type="checkbox"/> Other: _____ |
| <u>6/10/2008</u> | |

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DETAILED ACTION

1. This office action is in response to amendment filed 6/30/2009. Claims 3-6, 8, 16-18, and 20-24 are withdrawn from consideration as being drawn to non-elected invention. Accordingly, claims 1-25 are currently pending in the application.

Election/Restrictions

2. Applicant's election without traverse of group V and species iv (i.e. aliphatic carboxylic acid ester compound) in the reply filed on 6/30/2009 is acknowledged.

Claims 3-6, 8, 16-18 and 20-24 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 6/30/3009.

Claim Objections

3. Claims 7 and 11 are objected to because of the following informalities:

Claim 7 (line 2) recites "corsslinkable" and should read "crosslinkable".

Appropriate correction to the typographical is required.

Claim 11 (line 3-4) recites "a complex of a metal selected from the 7th, 8th, 9th, 10th, and 11th groups of the periodic table." Proper Markush grouping is listed as "selected from the group consisting of A, B, C and D". Alternatively it can be listed as "selected from A, B, C or D". See MPEP 2173.05(h). Accordingly, applicant is advised

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to rephrase the said recitation as “a complex of a metal selected from the group consisting of 7th, 8th, 9th, 10th, and 11th groups of the periodic table.”

Appropriate clarification and/or correction are required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-2, 9-14 and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Bandou et al (WO 03/029355).

It is noted that WO 03/029355 (WO) is being utilized for date purposes. However, since WO is not in English, US equivalent for WO, namely, Bandou et al (US 7,135,518 B1) is referred to in the body of the rejection below. All column and line citations are to the US equivalent.

Bandou et al discloses a curable composition (title) comprising 100 parts by weight of a polymer B and 1 part by weight of stearylamine in example 26 (see Table 6). Stearylamine has a melting point of 50⁰C (col. 20, line 4-5) and reads on the surface tack modifier of instant claims. See polymer synthesis example 2, wherein poly(n-butyl acrylate) having at its terminal a crosslinkable silyl group is prepared by atom transfer radical polymerization (i.e. polymer having at its terminal a Br group is converted to a polymer having at its terminal an alkenyl group which is then converted to a polymer

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having at its terminal a crosslinkable silyl group) in the presence of cuprous bromide as a catalyst. The polymer B has a molecular weight distribution of 1.2 (col. 33, lines 1-53). The (meth)acrylic group copolymer is made in the presence of Group VIII transition metal (col. 5, lines 33-37) and by living radical polymerization method (col. 5, lines 63-65).

Therefore, Bandou et al anticipate the present claims.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. Claims 15 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bandou et al (WO 03/029355).

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The discussion with respect to Bandou et al in paragraph 5 above is incorporated here by reference.

Bandou et al fail to disclose a composition comprising the surface tack modifier which is aliphatic carboxylic acid ester.

However, Bandou et al in the general disclosure teach that compound having a melting point of 40 to 75°C include amines such as stearylamine and fatty acid esters such as stearyl stearate. The compound having a melting point of 40 to 75°C makes the contamination resistance high (col. 19, lines 57-67; and col. 20-14). Therefore, in light of the teachings in Bandou et al, it would have been obvious to one skilled in art at the time invention was made to use stearyl stearate (i.e. aliphatic carboxylic acid ester made from an aliphatic carboxylic acid having 10 or more carbon atoms and aliphatic alcohol having 13 or more carbon atoms) in place of stearyl amine because Bandou et al teach that stearylamine and stearyl stearate are interchangeable and equivalent in their ability to improve contamination resistance.

9. Claims 1-2, 7, 9-15, 19 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakagawa et al (JP 2000-128924 A) in view of Bandou et al (WO 03/029355).

It is noted that WO 03/029355 (WO) is being utilized for date purposes. However, since WO is not in English, US equivalent for WO, namely, Bandou et al (US 7,135,518 B1) is referred to in the body of the rejection below. All column and line citations are to the US equivalent.

Nakagawa et al disclose curable composition comprising vinyl polymers having end alkenyl groups (i.e. end alkenyl groups read on crosslinkable functional group

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having carbon-carbon double bond). The vinyl polymer is prepared by living radical polymerization, especially atom transfer radical polymerization using copper complex as a catalyst. The vinyl polymers are made from acrylate monomers and have a molecular weight distribution of lower than 1.8 (abstract).

Nakagawa et al are silent with respect to surface tack modifier.

However, Bandou et al teach curable composition comprising a compound having a melting point of 40 to 75⁰C which include fatty acid esters such as stearyl stearate, stearic acid monoglyceride and pentaerythritol tetrastearate (i.e. read on aliphatic carboxylic acid ester of instant claims). The compound having a melting point of 40 to 75⁰C makes the contamination resistance high (col. 19, lines 57-67; and col. 20-14). Therefore, in light of the teachings in Bandou et al, it would have been obvious to one skilled in art at the time invention was made to add fatty acid esters such as stearyl stearate, stearic acid monoglyceride and pentaerythritol tetrastearate to the curable composition of Nakagawa et al, for improving contamination resistance.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KARUNA P. REDDY whose telephone number is (571)272-6566. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/K. P. R./
Examiner, Art Unit 1796

/Vasu Jagannathan/
Supervisory Patent Examiner, Art Unit 1796